

COGENERATION & WASTE HEAT RECOVERY SYSTEMS

DISRUPTIVE ENERGY SAVINGS AND DECARBONIZATION WITH OUR SMALL SCALE & LOW TEMPERATURE FLAGSHIP COGENERATION TECHNOLOGY

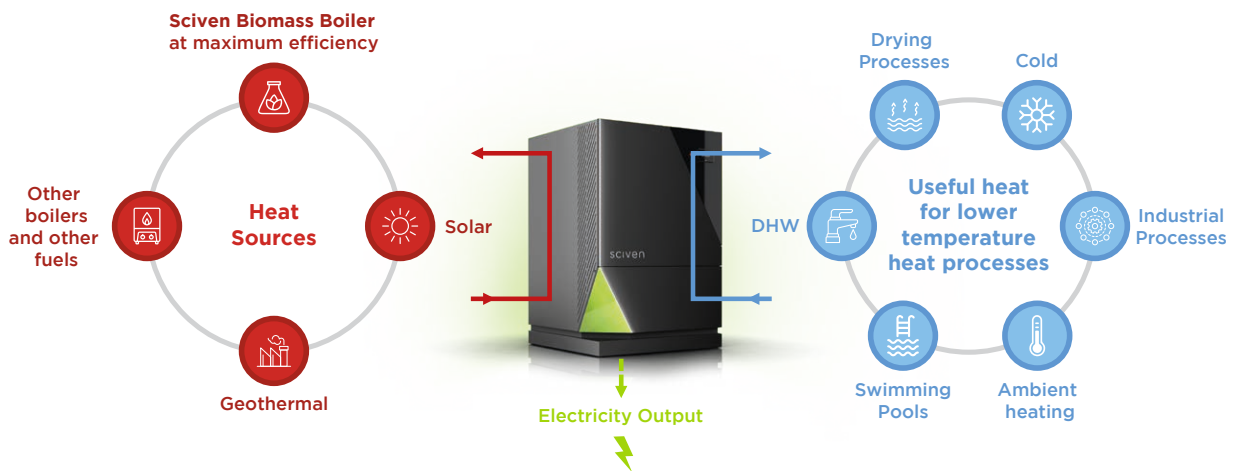
SCIVEN cogeneration technology reaches where no others can reach, enabling disruptive energy savings, decarbonization and new revenue sources to small scale and low temperature energy processes that now have access to a superior efficiency and sustainability standards

APPLICATIONS:

- PUBLIC & PRIVATE BUILDINGS OF COLLECTIVE USAGE
- INDUSTRIAL PROCESSES
- GEOTHERMAL SITES
- RENEWABLE ENERGY COMMUNITIES

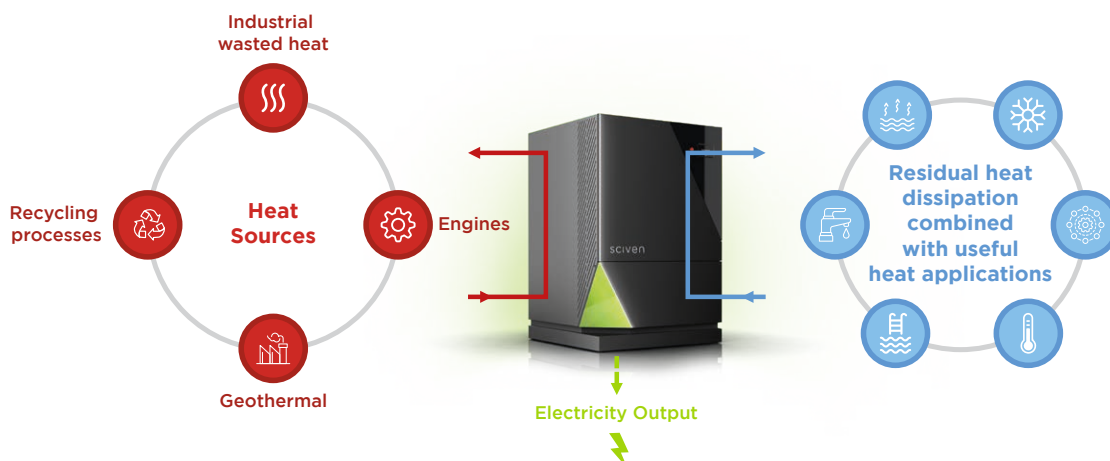
COGENERATION SYSTEMS

Your hot water process fully fulfilled with simultaneous clean electricity production and savings up to 30% of your electricity bill

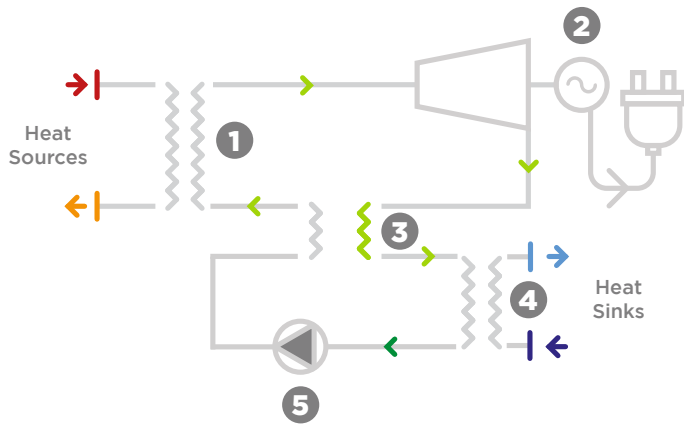


WASTE HEAT RECOVERY SYSTEMS

Complete turn-key projects to turn your waste heat stream into a decarbonized profit



HOW DOES IT WORK?



- 1 Evaporator**
A heat exchanger transforms heat with the high-pressure fluid inside the ORC circuit, passing it from undercooled liquid to superheated vapor.
- 2 Turbine**
The superheated vapor is then expanded in a turbine, causing it to rotate, thus producing clean electricity.
- 3 Regenerator**
The expanded working fluid is used to preheat the high-pressure liquid at the inlet of the evaporator to increase the system's efficiency.
- 4 Condenser**
A heat exchanger transforms useful heat with water e.g., from the condensation of the working fluid at low pressure.
- 5 Pump**
The pressure of the working fluid is increased.

Safety Regulations and Standards

- Machinery Directive (**Directive 2006/42/EC**)
- Pressurized Equipment Directive (**Directive 2014/68/EU**)
- Low voltage Directive (**Directive 2014/35/EU**)
- Electromagnetic Compatibility Directive (**Directive 2014/30/EU**)

TECHNICAL DATA



Heat Source	Inlet temperature	70 - 300 °C
	Outlet temperature	60 - 290 °C
	Temperature	70 - 300 °C
	Thermal power	50 - 500 kWt
	Medium	Water, steam, oil
Connections diameter		DN50 PN16
Cold Source	Inlet temperature	15 - 40 °C
	Outlet temperature	25 - 50 °C
	Temperature	10 - 60 °C
	Thermal power	45 - 450 kWt
	Medium	Water, air
Connections diameter		DN50 PN16
Electrical Output	Electrical power	5 - 50 kWe
	Grid connection	400V, 3ph, 50 Hz, 64A
	Data Connection	RJ45
Main Components	Working fluid	R1234ze
	Expander	SCIVEN SE 5-50
	Heat Exchangers	SCIVEN Brazed plate
	Pump	Rotary Vane Magnetic Coupling
	Control/Monitoring	SCIVEN iSENSE
Specifications	Dimensions (L x W x H)	1.2m x 1.2m x 1.7m
	Weight	800 - 1500 kg
	Lifetime	15-20 years

Modular integration and tailor-made specifications

Specifications to be optimized according to the process characteristics. Multiple modules can be applied.

iSENSE, IA and remote monitoring

SCIVEN iSENSE is a comprehensive system not only for remote monitoring of our equipments but also to adapt their configuration along its operation. Using predictive advanced algorithms, iSENSE can adjust your system configuration to achieve maximum performance, which translates to maximum savings and decarbonization for your processes.

Support:

